



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/720,161

03/23/2004

Toshiya Shozaki

018775-884

4323

21839 7590 03/19/2008
BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

WASHINGTON, JAMARES

ART UNIT

PAPER NUMBER

2625

NOTIFICATION DATE

DELIVERY MODE

03/19/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/720,161	SHOZAKI ET AL.	
	Examiner	Art Unit	
	Jamare Washington	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and response received on September 21, 2007 has been entered. Claims 1-24 are currently pending with claims 22-24 having been newly added. Amendments and response are addressed hereinbelow.

Drawings

2. Examiner understands the intent and purpose of Fig. 22 as pointed out by applicant as showing images of differing qualities. However, all images depicted in Fig. 22 should not be of "poor quality" as the transition between differing qualities should be clearly expressed. Examiner suggests larger images to clearly express the transition of a poor quality image to a higher quality image as shown in Fig. 22. Examiner maintains previous objection to Fig. 22.

Specification

3. In light of the newly provided title, examiner has accepted and entered the amendment as it is more indicative of the invention to which the claims are directed.

Claim Objections

4. Claims 3, 11, and 17 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 3 recites "...wherein said input controller acquires the coded data first only at a plurality of levels including the lowest level..." and depends from claim 2 (which depends from claim 1) that recites "...which acquires the coded data by said input interface first only at a low level...".

Claim 3 is thus broader in scope than that of claim 2 (which depends from claim 1). A claim which depends from a subsequent claim can only be "limit" the subject matter set forth in the previous claim as stated by 37 CFR 1.75(c). Claim 11 recites similar subject matter and depends from claim 10. Examiner objects to claim 11 and 17 for the reasons provided for claim 3 above. Appropriate correction is required.

Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 8 recites identical subject matter as that of parent claim 5 wherein the image processing apparatus [further] comprises a print engine which prints the index image received from said index make[r].

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-14 and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yuuichi Bannai et al (US 5267052).

Regarding claim 1, Bannai et al discloses an image processing apparatus (Fig. 1 image communication terminal) which acquires coded data of a plurality of images from an external recording medium (Col. 5 lines 54-57) recording hierarchically encoded data of the plurality of images in the unit of hierarchically encoding (Col. 5 lines 57-64), the apparatus comprising:

an input interface which receives signals from an external recording medium (Fig. 1 numeral 5 communication control unit must have an input interface to connect to the communication network 12);

an image input controller (Fig. 1 numeral 5 communication control) which acquires the coded data by said input interface first only at a low level of the unit of hierarchical encoding from the external recording medium over the plurality of images (Col. 5 lines 54-60; wherein the image data has been subjected to progressive encoding);

a decoder (Fig. 1 numeral 9) which decodes the coded data acquired by said image input controller (Col. 6 lines 23-27); and

a storage device (Fig. 1 numeral 10) which stores data decoded by said decoder (Col. 6 lines 24-30).

Regarding claim 2, Bannai et al discloses the image processing apparatus according to claim 1, wherein the low level of the unit of hierarchical encoding is the lowest level (Col. 17 lines 67 through Col. 18 line 4; wherein in practical application of the aforementioned embodiment, icon image data is transmitted from the terminal before original image data. Explained at Col. 2 lines 64-67).

Regarding claim 3, Bannai et al discloses the image processing apparatus according to claim 2, wherein said input controller acquires the coded data first only at a plurality of levels including the lowest level of the unit of hierarchical encoding from the external recording medium over the plurality of images (Col. 5 lines 57-60 referencing "progressive encoding"

resulting in image data having first, second, and third stage encoded data therewith as described at Col. 6 lines 61-68 and Col. 7 lines 1-3.)

Regarding claim 4, Bannai et al discloses the image processing apparatus according to claim 1, further comprising a print engine which prints an image based on data decoded by said decoder (Col. 8 lines 8-22; The printer as disclosed must have a “print engine” to be operable as an output printing device).

Regarding claim 5, Bannai et al discloses the image processing apparatus according to claim 1, further comprising:

an index maker (Given Fig. 4 and Col. 6 lines 23-32, there must exist an “index maker”) which makes an index image of the plurality of images based on the data at a low level of the unit of hierarchical encoding on the plurality of images (Col. 6 lines 23-32);

a print engine (see rejection of claim 4) which prints the index image received from said index maker (Col. 7 lines 54-56 and Col. 8 lines 3-5);

an operational device (Fig. 1 numeral 2 keyboard) which instructs to make an index to said index maker (Col. 5 lines 42-47); and

a controller (Fig. 1 numeral 1 CPU) which allows to activate said index maker when instructed by said operational device (“In FIG. 1, a central processing unit (CPU) 1 controls the operation of the entire image communication terminal. A keyboard 2 inputs various kinds of operation commands and character code data to the CPU 1” at Col. 1 lines 7-11) after data acquisition of the data at a low level of the unit of hierarchical encoding is completed (Col. 5

lines 60-64 wherein the data is stored in memory 7 after the completion of reception. Memory 7 holds encoded image data as described in Col. 6 lines 23-32).

Regarding claim 6, Bannai et al discloses the image processing apparatus according to claim 5, wherein said image input controller continues to receive data at higher levels of the unit of hierarchical encoding for each of the plurality of images, after the data acquisition of the data at the low level of the unit of hierarchical encoding is completed (Indicated by “The facsimile receiving unit 318-2 decodes the original images received after storing the previously received icon images in a storage unit 318-3...” in Col. 17 lines 37-39).

Regarding claim 7, Bannai et al discloses the image processing apparatus according to claim 5, further comprising a display device (Fig. 1 numeral 3) which displays a state of data acquisition of the coded data (Col. 17 lines 59-68 and Col. 18 lines 1-11 wherein the state of data acquisition is displayed in the form of “icon” images” before receiving “original” images) divided by levels of the unit of hierarchical encoding (The reception of the “icon” image before receiving the “original” or higher resolution image reads on divided by levels of the unit of hierarchical encoding).

Regarding claim 8, Bannai et al discloses the image processing apparatus according to claim 5, further comprising a print engine which prints the index image received from said index make[r] (Col. 7 lines 54-56 and Col. 8 lines 3-5).

Regarding claim 9, Bannai et al discloses an image processing method for acquiring coded data of a plurality of images from an external recording medium which records hierarchically encoded data of the plurality of images in the unit of hierarchically encoding (see rejection of claim 1; Image processing apparatus carrying out the method), the method comprising the steps of:

acquiring the coded data first only at a low level of the unit of hierarchical encoding from the external recording medium over the plurality of images (see rejection of claim 1); and

decoding the coded data acquired from the external recording medium (see rejection of claim 1).

Regarding claim 10, Bannai et al discloses the image processing method according to claim 9, wherein the low level of the unit of hierarchical encoding is the lowest level (see rejection of claim 2).

Regarding claim 11, Bannai et al discloses the image processing method according to claim 10, wherein the coded data is acquired first only at a plurality of levels including the lowest level of the unit of hierarchical encoding from the external recording medium over the plurality of images (see rejection of claim 3).

Regarding claim 12, Bannai et al discloses the image processing method according to claim 9, further comprising:

making an index image on the plurality of images based on the data at a low

Art Unit: 2625

level of the unit of hierarchical encoding on the plurality of images (see rejection of claim 5);
receiving an instruction by a user to make an index (see rejection of claim 5); and
activating the step of making the index image when instructed by the user after data acquisition of the data at a low level of the unit of hierarchical encoding is completed (see rejection of claim 5).

Regarding claim 13, Bannai et al discloses the image processing method according to claim 12, further comprising the step of acquiring data at high level of the unit of hierarchical encoding for each of the plurality of images, after the data acquisition of the data at a low level of the unit of hierarchical encoding is completed (see rejection of claim 6).

Regarding claim 14, Bannai et al discloses the image processing method according to claim 12, further comprising the step of displaying a state of data acquisition of the coded data divided by levels of the unit of hierarchical encoding (see rejection of claim 7).

Regarding claim 21, Bannai et al discloses the computer readable recording medium according to claim 18, the program further comprising the step of displaying a state of data acquisition of the coded data divided by levels of the unit of hierarchical encoding (see rejection of claim 7).

Regarding claim 22, Bannai et al discloses the image processing apparatus according to claim 1, wherein the coded data is compressed data (Suggested at Col. 6 lines 61-63; wherein the

Art Unit: 2625

encoder performs entropy encoding using arithmetic encoding which is a form of lossless compression).

Regarding claim 23, Bannai et al discloses the image processing method according to claim 9, wherein the coded data is compressed data (Suggested at Col. 6 lines 61-63; wherein the encoder performs entropy encoding using arithmetic encoding which is a form of lossless compression).

Regarding claim 24, Bannai et al discloses the computer readable recording medium according to claim 15, wherein the coded data is compressed data (Suggested at Col. 6 lines 61-63; wherein the encoder performs entropy encoding using arithmetic encoding which is a form of lossless compression).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bannai et al in view of Hiroshi Kajiwara (US 6985630 B2).

Regarding claim 15, Bannai et al discloses the method of acquiring coded data of a plurality of images from an external recording medium which records hierarchically encoded data of the plurality of images in the unit of hierarchically encoding, the method comprising the steps of:

acquiring the coded data first only at a low level of the unit of hierarchical encoding from the external recording medium over the plurality of images (see rejection of claim 1); and

decoding the coded data acquired from the external recording medium (see rejection of claim 1).

Bannai et al fails to disclose or fairly suggest a computer readable recording medium which records an image processing program for carrying out the above method.

Kajiwara, in the same field of endeavor, teaches the use of a computer readable recording medium which records an image processing program for carrying out computer implemented methods in an image processing apparatus (Col. 18 lines 15-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the method performed by the image processing apparatus as disclosed by Bannai et al to utilize a computer readable recording medium which records an image processing program so a computer or an apparatus may read and execute the program code stored to realize the functionality of the hardware.

Regarding claim 16, Bannai discloses the computer readable recording medium according to claim 15 (see rejection of claim 15), wherein the low level of the unit of hierarchical encoding is the lowest level (see rejection of claim 2).

Regarding claim 17, Bannai discloses the computer readable recording medium according to claim 16 (see rejection of claim 15 for computer readable recording medium), wherein the coded data is acquired first only at a plurality of levels including the lowest level of the unit of hierarchical encoding from the external recording medium over the plurality of images (see rejection of claim 3).

Regarding claim 18, Bannai discloses the computer readable recording medium according to claim 15 (see rejection of claim 15 for computer readable recording medium), the program further comprising the steps of:

making an index image on the plurality of images based on the data at a low level of the unit of hierarchical encoding on the plurality of images (see rejection of claim 5);

receiving an instruction by a user to make an index (see rejection of claim 5); and

activating the step of making the index image when instructed by the user after data acquisition of the data at a low level of the unit of hierarchical encoding is completed (see rejection of claim 5).

Regarding claim 19, Bannai et al discloses the computer readable recording medium according to claim 18 (see rejection of claim 15 for computer readable recording medium), the

program further comprising the step of acquiring data at high level of the unit of hierarchical encoding for each of the plurality of images, after the data acquisition of the data at a low level of the unit of hierarchical encoding is completed (see rejection of claim 5).

Regarding claim 20, Bannai et al discloses the computer readable recording medium according to claim 18 (see rejection of claim 15 for computer readable recording medium), the program further comprising the step of displaying that an image can be printed after data at the high level of the unit of hierarchical encoding is acquired for the image (Col. 18 lines 25-30 wherein an icon image is selected and the original image is displayed and may be printed in accordance with an indication from a keyboard), and of outputting the image based on the data acquired on the image when instructed by a user (Col. 18 lines 25-27 wherein an icon is selected and the original image is displayed).

Response to Arguments

10. Applicant's arguments, see amendment after non-final, filed September 21, 2007, with respect to the rejection(s) of claim(s) 1-14 under 35 USC 102(b) and claims 15-21 under USC 103(a) have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bannai et al (US 5267052).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamares Washington whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

Jamares Washington
Junior Examiner
Art Unit 2625

/J. W./
Examiner, Art Unit 2625

/Jamares Washington/
Examiner, Art Unit 2625

March 5, 2008

Application/Control Number: 10/720,161
Art Unit: 2625

Page 15